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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,687	10/14/2003	Xianhai Chen	014116-81.00US	7052

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EXAMINER
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ROSSI, JESSICA

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 05/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/685,687

Applicant(s)

CHEN ET AL

Examiner

Jessica L. Rossi

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— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/14/03
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_

**DETAILED ACTION*****Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "3" (Figure 1) and "5" (Figure 3) have both been used to designate the adhesive. Also, reference characters "5" (Figure 1) and "6" (Figure 3) have both been used to designate the SiO<sub>2</sub> layer. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

\*Please note that the specification consistently uses reference character "3" to designate the adhesive and reference character "5" to designate the SiO<sub>2</sub> layer (p. 5, section [0024]); therefore, only Figure 3 should be corrected.

***Specification***

2. The disclosure is objected to because of the following informalities:

Abstract, line 2: insert --,-- after "PDLC".

Appropriate correction is required.

***Claim Objections***

3. Claim 1 is objected to because of the following informalities:

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Claim 1, line 5: "surfaces" should be --surface--.

Claim 1, line 9: "layer" should be deleted after "material".

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Bryan (US 6151153; provided in IDS).

With respect to claim 1, Bryan is directed to a method for making an electro-optical sensor by providing a glass substrate 17 comprising an optically smooth top surface and bottom surface, coating the top surface of the glass with a transparent electrode 14, applying a composition of electro-optic sensor material 12 as a layer over the electrode, applying a thin layer of adhesive (not shown) over the layer of electro-optic sensor material, and laminating a pellicle film 26/230 bearing a dielectric mirror layer 232 to the adhesive layer such that the dielectric mirror layer is substantially optically smooth against the optic sensor material (Figures 1-2; column 3, line 54 – column 4, line 66; column 5, lines 13-25; column 7, lines 60-62; column 9, lines 17-30).

Regarding claim 2, the reference teaches the optic sensor material being PDLC (column 7, lines 26-30).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bryan as applied to claim 1 above and further in view of Holman et al. (US 6832769).

Regarding claim 3, Bryan is silent as to what type of lamination is used to laminate the pellicle film to the adhesive layer (column 9, lines 17-30) wherein one reading the reference as a whole would have appreciated a particular method not being critical to the invention. Therefore, it would have been obvious to the skilled artisan to laminate the film to the adhesive layer using vacuum lamination because such a lamination technique is known in the art for laminating a pre-formed, flexible layer to another layer via an adhesive, as taught by Holman (column 3, line 64 – column 4, line 31), where vacuum lamination expels unwanted air from between the layers (Holman; column 4, lines 27-31).

Regarding claims 4-5, selection of a particular vacuum magnitude would have been within purview of the skilled artisan.

8. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bryan and Holman et al. as applied to claim 1 and 3 above, and further in view of Nakamura et al. (US 6346164).

Regarding claims 6-7, it would have been obvious to the skilled artisan to have the pellicle film progressively engage the adhesive layer during the vacuum laminating step such

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that the pellicle and adhesive are disposed at an angle relative to each other because it is known to dispose two layers at an angle relative to each other when vacuum laminating the same, as taught by Nakamura (Figure 2; column 2, lines 30-45), wherein such disposition aids in the removal of air from between the layers.

Regarding claim 8, selection of a particular vacuum magnitude would have been within purview of the skilled artisan.

### ***Double Patenting***

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 1-8 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of U.S. Patent No. 6,866,887 in view of Bryan.

With respect to claims 1-8, the claims of the copending application teach all the limitations except coating the glass substrate with a transparent electrode before applying the sensor material and the pellicle film bearing a dielectric mirror layer. Such would have been obvious to the skilled artisan because such is known in the art, as taught by Bryan, wherein a transparent electrode and dielectric mirror are components readily incorporated into an elector-optic sensor.

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jessica L. Rossi** whose telephone number is **571-272-1223**. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine R. Copenheaver can be reached on 571-272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jessica L. Rossi  
Primary Examiner  
Art Unit 1733